

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for producing a high loft, low density nonwoven web ~~laminate~~, the nonwoven web having X, Y and Z dimensions, with the X dimension being in a machine direction, the Y dimension being in a cross machine direction and the Z dimension being in a loft direction, comprising, in order:

a) forming a group of crimpable, substantially continuous, spunbond, bicomponent fibers of A/B configuration and depositing the group of fibers onto a forming surface without the addition of heat to the fibers before deposition;

b) first heating the fibers at a time and a temperature sufficient to induce a relaxation of molecular orientation of one side of the fiber while controlling or minimizing the forces which tend to impede crimping of the fibers whereby the fibers are allowed to crimp in the Z-direction with no more than a non-functional bonding of the fibers;

c) after the first heating, cooling the group of fibers below the temperature where the fibers will bond to each other and thereby inducing the fibers to crimp while controlling or minimizing the forces which tend to impede crimping of the fibers whereby the fibers are allowed to crimp in the Z-direction; and

d) ~~controlling or minimizing the forces which tend to impede crimping of the fibers when performing steps b) and c) whereby the fibers are allowed to crimp in the Z-direction; and~~

~~_____e) bonding the~~ crimped fibers of the high loft, low density nonwoven web ~~by a pattern bonding in a manner to substantially maintain its original~~ high loft.

2. (Currently Amended) The method according to Claim 1 wherein the ~~bonding step of 1(e)~~ of step d) is performed by pattern bonding the high loft, low density nonwoven web.

3. (Original) The method according to Claim 2 further comprising the step of placing the high loft, low density nonwoven web on a transportation sheet before pattern bonding.

4. (Original) The method according to Claim 2 wherein the pattern bonding is a point bonding.

5. (Original) The method according to Claim 4 wherein the pattern bonding is a 5% to 10% surface area pattern bonding.

6. (Original) The method according to Claim 5 wherein the pattern bonding is a spiral bond.

7. (Original) The method according to Claim 1 wherein the high loft, low density nonwoven web has a basis weight of less than or equal to 1.5 osy (50 gsm).

8. (Original) The method according to Claim 1 further comprising: treating the high loft, low density nonwoven web with a surfactant selected to improve the hydrophilicity thereof.

9. (Original) The method according to Claim 1 further comprising: bonding at least one XY planar surface of the high loft, low density nonwoven web to a liquid barrier substrate.

10. (Original) The method according to Claim 9 wherein the liquid barrier substrate is breathable.

11. (Original) The method according to Claim 10 wherein the breathable liquid barrier substrate is a microporous film.

12. (Original) The method according to Claim 1 further comprising: bonding at least one XY planar surface of the high loft, low density nonwoven web to an expandable substrate.

13. (Original) The method of Claim 12 wherein the expandable substrate is elastic.

14. (Original) The method according to Claim 12 wherein the expandable substrate comprises filaments.

15. (Original) The method according to Claim 12 wherein the expandable substrate comprises a nonwoven web.

16. (Original) The method according to Claim 12 wherein the expandable substrate comprises a film.

17. (Original) The method according to Claim 13 wherein the expandable substrate comprises filaments.

18. (Original) The method according to Claim 13 wherein the expandable substrate comprises a web.

19. (Original) The method according to Claim 13 wherein the expandable substrate comprises a film.

20. (Currently Amended) The method of Claim 12 wherein the expandable substrate is retractable upon the application of heat to the laminate.

21-39. (Canceled)

40. (Currently Amended) A nonwoven material made according to the method of Claim 1 further comprising:

- a) a web of substantially continuous A/B bicomponent crimped fibers;
- b) the web having a formation index averaging above about 37.6 on the top side of the web when the web has a bulk to about 0.1 inches in the Z axis, or
- c) the web having a formation index averaging above about 32.03 on the top side of the web when the web has a bulk of over about 0.1 inches in the Z axis; and
- d) the web subsequently being pattern bonded.

41. (Currently Amended) A nonwoven material made according to the method of Claim 1 ~~further~~ comprising:

- a) a web of substantially continuous A/B bicomponent crimped fibers;
- b) the web having a formation index averaging above about 43.76 on the wire side of the web when the web has a bulk to about 0.1 inches in the Z axis, or
- c) the web having a formation index averaging above about 37.09 on the wire side of the web when the web has a bulk of over about 0.1 inches in the Z axis; and
- d) the web subsequently being pattern bonded.

42-57. (Canceled)

58. (New) The method of Claim 1, further comprising the step of producing the high loft, low density nonwoven web on a forming wire, wherein the high loft, low density nonwoven web has a top side, a top side formation index, a wire side, and a wire side formation index.

59. (New) The method of Claim 58, wherein the top side formation index differs from the web side formation index by less than about 11%.

60. (New) The method of Claim 58, wherein:

- a) the top side formation index averages above about 37.6 when the web has a bulk to about 0.1 inches in the loft direction; and
- b) the top side formation index averages above about 32.03 when the web has a bulk of over 0.1 inches in the loft direction.

61. (New) The method of Claim 58, wherein:

- a) the wire side formation index averages above about 43.76 when the web has a bulk to about 0.1 inches in the loft direction; and
- b) the wire side formation index averages above about 37.09 when the web has a bulk of over about 0.1 inches in the loft direction.

62. (New) The method of Claim 58, wherein:

a) the top side formation index averages above about 37.6 when the web has a basis weight of up to 1.5 osy; and

b) the top side formation index averages above about 32.03 when the web has a basis weight above 1.5 osy.

63. (New) The method of Claim 58, wherein:

a) the wire side formation index averages above about 43.76 when the web has a basis weight up to 1.5 osy; and

b) the wire side formation index averages above about 37.09 when the web has a basis weight above 1.5 osy.

64. (New) The method of Claim 1, wherein the fibers have a fiber denier of between about 0.1 dpf to about 9.0 dpf.

65. (New) The method of Claim 1, wherein the fibers have a fiber denier of between about 0.1 dpf to about 5.0 dpf.

66. (New) The method of Claim 1, wherein the fibers have a fiber denier of between about 0.1 dpf to about 3.3 dpf.

67. (New) The method of Claim 1, wherein the fibers have a fiber denier of between about 3.4 dpf to about 4.2 dpf.

68. (New) The method of Claim 1, wherein the fibers have a TiO₂ percentage of about 0.1% to about 5%.

69. (New) The method of Claim 1, wherein the fibers of the nonwoven web are integrally bonded.